

**JP62231930A
LIQUID CRYSTAL DISPLAY DEVICE
STANLEY ELECTRIC CO LTD**

**Inventor(s): ; SUGIHARA KENICHIRO ; TANAKA YUJI ; NAKANISHI TORU
Application No. 61074292, Filed 19860402, Published 19871012**

Abstract: PURPOSE: To easily increase the size of a liquid crystal display device at low cost by mixing desired pigments with cholesteric- nematic mixed liquid crystal made in microcapsules and printing the mixture on a film substrate where a transparent electrode.

CONSTITUTION: Cholesteric liquid crystal and P-type nematic liquid crystal are mixed together into P-type liquid crystal, whose pitch is adjusted properly to about 5W15#μ#m to obtain microcapsules; and pigments of the three primary colors R, G, and B are mixed to form three kinds of inklike liquid crystal 10. Those three kinds of liquid crystal 10 are printed on an upper substrate 11 which is a film substrate, a lower substrate 12 provided with a counter electrode is arranged, and upper and lower polarizing plates 13 and 13 are provided on both sides. Thus, a liquid crystal cell which makes a full-color display is constituted and driven with a voltage signal applied between the upper and lower electrodes. The film substrates are used, so they can be connected to a printed board, electrode terminals are easily led out, and a little space for leading out the terminals is required, so the size is easily increased.

COPYRIGHT: (C)1987,JPO&Japio

Int'l Class: G02F001133 G02F00113

MicroPatent Reference Number: 000113639

COPYRIGHT: (C)JPO
